

IN THE CLAIMS

Please amend the claims as follows:

1 (Currently Amended): A dynamically reconfigurable intrusion-tolerant network interposed between a service requesting client and a plural protected servers to minimize the impact of an intrusive event[[s]] on the protected servers by providing plural responses to an incoming network service request, the plural responses generated at at least one of the protected servers in response to the incoming network service request and providing redundancy for the intrusion tolerant network, comprising:

a proxy server ~~for receiving~~ configured to receive the incoming network service requests from a the client and to forwarding said requests pursuant to a tolerance protocol to a the protected servers, ~~and responding to a client;~~

an acceptance monitor ~~for receiving~~ configured to receive from the protected servers one or more of the plural responses ~~to the client request and to applying~~ one or more acceptance tests thereto; and

a ballot monitor ~~for receiving~~ configured to receive from the acceptance monitor the results of the applied acceptance tests and to determine ~~determining~~ a preferred response of said plural responses to forward to the service requesting client request.

2 (Currently Amended): A dynamically reconfigurable intrusion-tolerant network interposed between a service requesting client and a plural protected servers to minimize the impact of an intrusive event[[s]] on the protected servers by providing plural responses to an incoming network service request, the plural responses generated at at least one of the protected servers in response to the incoming network service request and providing redundancy for the intrusion tolerant network, comprising:

a proxy server ~~for receiving~~ configured to receive incoming network service requests

from a the client and to forwarding said requests pursuant to a tolerance protocol to a the protected servers, ~~and responding to a client~~;

an acceptance monitor ~~for receiving~~ configured to receive from the protected servers one or more of the plural responses ~~to the client request~~ and to applying one or more acceptance tests thereto;

a ballot monitor ~~for receiving~~ configured to receive from the acceptance monitor ~~the~~ results of the applied acceptance tests and ~~determining~~ to determine a preferred response of said plural responses to forward to the service requesting client request;

an intrusion sensor responsive to anomalies in operation of the network ~~for detecting~~ and configured to detect threats to the network; and

an adaptive reconfigurer ~~for altering~~ configured to alter the tolerance protocol and ~~reconfiguring~~ to reconfigure a network forwarding scheme among the proxy server, the acceptance monitor, and the ballot monitor in response to a predetermined condition.

3 (Currently Amended): A network according to Claim 1, wherein said proxy server further is configured to forward[[s]] said incoming network service request[[s]] to an acceptance monitor and a ballot monitor.

4 (Currently Amended): A network according to Claim 1, wherein said proxy server comprises multiple independent proxy servers.

5 (Currently Amended): A network according to Claim 1, wherein said acceptance monitor comprises multiple independent acceptance monitors.

6 (Currently Amended): A network according to Claim 1, wherein said ballot monitor

comprises multiple independent ballot monitors.

7 (Currently Amended): A network according to Claim 2, wherein said intrusion sensor comprises a multiplicity of sensors configured to monitor ~~monitoring~~ predetermined operations of the network.

8 (Currently Amended): A network according to Claim 2, wherein said adaptive reconfigurer is configured to reconfigure[[s]] the network forwarding scheme to establish parallel forwarding among the protected server, the acceptance monitor, and the ballot monitor.

9 (Currently Amended): A network according to Claim 1, wherein said proxy server is configured to forward[[s]] said incoming network service request[[s]] to ~~a protective~~ the at least one of the protected servers, the acceptance monitor, and the ballot monitor.

10 (Currently Amended): A network according to Claim 1, wherein said acceptance monitor is configured to apply ~~applies~~ one or more acceptance tests taken from the group of satisfaction of requirements test, accounting test, reasonableness test, or computer run time test.

11 (Currently Amended): A network according to Claim 1, wherein said ballot monitor is configured to ~~determines-a~~ the preferred response using a process taken from the group of simple majority voting, Byzantine agreement process, or adjudication process.

12 (Currently Amended): A network according to Claim 1, wherein said proxy server is configured to forward[[s]] said incoming network service request[[s]] to multiple

independent protected servers.

13 (Currently Amended): A network according to Claim 12, wherein said acceptance monitor is configured to receive[[s]] multiple responses from ~~multiple protective~~ the protected servers and ~~applies to apply~~ independent acceptance tests to each received response.

14 (Currently Amended): A network according to Claim 13, wherein said ballot monitor is configured to receive[[s]] respective responses from ~~multiple~~ respective acceptance monitors and to determines-a the preferred response from the ~~multiple~~ respective responses received.

15 (Currently Amended): A network according to Claim 2, wherein at least one of ~~said~~ the proxy server, the acceptance monitor, the ballot monitor, the intrusion sensor, and the adaptive reconfigurer comprises a separate and independent processor.

16 (Currently Amended): A network according to Claim 2, wherein two or more of ~~said~~ the proxy server, the acceptance monitor, the ballot monitor, the intrusion sensor, and the adaptive reconfigurer are configured to operate on a single processor.

17 (Currently Amended): A network according to Claim 2, wherein the adaptive reconfigurer is configured to reconfigure[[s]] the network forwarding scheme to establish multiple independent network forwarding paths.

18 (Currently Amended): A method for reconfiguring communication among network components to minimize the impact of an intrusive event[[s]] on plural protected servers by

providing plural responses to an incoming network service request, the plural responses generated at at least one of the plural servers in response to an incoming network service request from a service requesting client in order to provide redundancy, comprising:

receiving [[a]] the incoming network service request and forwarding the request pursuant to a tolerance protocol;

generating a the plural responses to the incoming network service request and forwarding the plural responses;

applying one or more acceptance tests to the plural responses and forwarding the acceptance test results;

polling the acceptance test results to determine a preferred response of the plural responses based upon the poll; and

forwarding the preferred response to the service requesting client.

19 (Currently Amended): A method for dynamically reconfiguring communication among network components pursuant to multiple tolerance protocols to minimize the impact of an intrusive event[[s]] on plural protected servers by providing plural responses to an incoming network service request, the plural responses generated at at least one of the protected servers in response to an incoming network service request from a service requesting client in order to provide redundancy, comprising:

receiving [[a]] the incoming network service request and forwarding the request pursuant to a tolerance protocol;

generating a the plural responses to the incoming network service request and forwarding the plural responses;

applying one or more acceptance tests to the plural responses and forwarding the acceptance test results;

polling the acceptance test results to determine a preferred response of the plural responses based upon the poll;
forwarding the preferred response to the client;
detecting any anomalies in operation of the network; and
revising the tolerance protocol and a network forwarding scheme in response to an anomaly in operation of the network.

20 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~ receiving ~~[[a]]~~ the incoming network service request further comprises:
receiving ~~[[a]]~~ the incoming network service request at a proxy server.

21 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~ receiving ~~[[a]]~~ the incoming network service request further comprises:
forwarding ~~[[a]]~~ the incoming network service request to the at least one protected server.

22 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~ receiving ~~[[a]]~~ the incoming network service request further comprises:
forwarding the incoming network service request to multiple of the protected servers.

23 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~ receiving ~~[[a]]~~ the incoming network service request further comprises:
forwarding the incoming network service request on multiple independent paths.

24 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~

generating ~~[[a]]~~ the plural responses comprises:

generating ~~[[a]]~~ the plural responses at any of ~~[[a]]~~ the protected servers.

25 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
~~generating a response and~~ forwarding the plural responses comprises:

forwarding ~~[[a]]~~ the plural responses to an acceptance monitor.

26 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
~~generating a response and~~ forwarding ~~[[a]]~~ the plural responses comprises:

forwarding the plural responses to multiple acceptance monitors.

27 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
~~generating a response and~~ forwarding ~~[[a]]~~ the plural responses comprises:

forwarding the plural responses on multiple independent paths.

28 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
applying one or more acceptance tests comprises:

applying one or more acceptance tests at an acceptance monitor.

29 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
applying one or more acceptance tests comprises:

applying independent acceptance tests to each of the plural responses.

30 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
~~applying one or more acceptance tests and~~ forwarding the acceptance test results comprises:

forwarding the acceptance test results to a ballot monitor.

31 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
~~applying one or more acceptance tests and~~ forwarding the acceptance test results comprises:
forwarding the acceptance tests results to multiple ballot monitors.

32 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~
~~applying one or more acceptance tests and~~ forwarding the acceptance test results comprises:
forwarding the acceptance tests results on multiple independent paths.

33 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~ polling
the acceptance test results comprises:
polling the acceptance test results at a ballot monitor.

34 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~ polling
the acceptance test results comprises:
applying multiple polling routines.

35 (Currently Amended): A method according to Claim 18, wherein the ~~step of~~ polling
the acceptance test results comprises:
applying multiple polling routines to the responses from each of a multiplicity of ballot
monitors.

36 (Currently Amended): A method according to Claim 18, wherein at least one of the
~~steps of~~ receiving an incoming network service request, generating ~~[[a]]~~ the plural responses ~~to~~

a service request, applying one or more acceptance tests, polling the acceptance test results, and forwarding the preferred response to a client comprises:

utilizing a separate processor to enhance independence of operation and minimize the impact of the intrusive event[[s]].

37 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme further comprises:

forwarding the plural responses on multiple independent paths.

38 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme comprises:

forwarding the plural responses to multiple independent acceptance monitors.

39 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme comprises:

forwarding results of applied acceptance tests to multiple independent ballot monitors.

40 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme comprises:

forwarding the preferred response to multiple independent proxy servers.

41 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme further comprises:

comparing any detected anomalies with known anomalies to identify a predetermined intrusion tolerance protocol.

42 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme comprises:

determining ~~the~~ an acceptance monitor[[s]] that will be used to support ~~the~~ a selected tolerance protocol.

43 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme comprises:

determining ~~the~~ a ballot monitor[[s]] that will be used to support ~~the~~ a selected tolerance protocol.

44 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme comprises:

determining ~~the~~ a proxy server[[s]] that will be used to implement ~~the~~ a selected tolerance protocol.

45 (Currently Amended): A method according to Claim 19, wherein the ~~step of~~ revising the tolerance protocol and network forwarding scheme comprises:

prioritizing ~~the~~ multiple incoming network service requests.